HEATRAE SADIA

The quality name in water heating

SUPREME 150, 165, 180

Fitting Instructions and User Guide

INTRODUCTION

Thank you for purchasing a Heatrae Sadia Supreme. The Boiling water heater is manufactured to the highest standards and has been designed to meet all the latest relevant safety specifications.

This Heatrae Sadia water heater must be installed (Sections 1-5), commissioned (Section 7) and maintained (Sections 8-9) by a competent person. Please read and understand these instructions prior to installing your Heatrae Sadia water heater. Following installation and commissioning the operation of the heater should be explained to the user (Section 11) and these instructions left with them for future reference.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

COMPONENT CHECKLIST

Before commencing installation check that all the following components have been supplied with your Supreme heater.

- Wall mounting bracket
- No.12 x 2” screws (2 off)
- No.8 x 1” screw (1 off)
- No.12 x 2” wall plug (2 off)
- No.8 x 1” wall plug (1 off)
- 15mm x 15mm straight push-fit connector
- 15mm x 15mm 90° elbow push fit connector

TECHNICAL SPECIFICATIONS

Electrical rating	2.3 - 2.5 kW 230 - 240V ~	(2.5 ltr)
Nominal capacities	Model 150	2.5 litres
	Model 165	5.0 litres
	Model 180	7.5 litres
Weight (full)	Model 150	8.4 kg
	Model 165	11.8 kg
	Model 180	15.4 kg
Rated pressure	0MPa (0 bar)	
Minimum supply pressure	0.05MPa (0.5 bar)	
Maximum supply pressure	1.0MPa (10 bar)	
Enclosure rated	IP X2	
A-weighted sound pressure level is below	70 dB	

Nominal commissioning times (minutes) to temperature ready

Supreme 150	16
Supreme 165	24
Supreme 180	32

1.0 IMPORTANT INSTALLATION POINTS

1.1 The Supreme stores and dispenses water at or close to boiling point at all times it is switched on. Due caution must be taken when choosing a location for the product to minimise misuse. Locate the unit over a draining board NOT over the sink or basin.

1.2 Push fit connectors DO NOT grip chromed or stainless pipe.

1.3 The Supreme is a vented water heater. The vent pipe must never be blocked or obstructed, it must be a minimum of 15mm outside diameter pipe. Where the vent pipe length exceeds 3m the pipe diameter should be increased. The vent pipe must be laid to a continuous fall and discharge in a safe, visible position; it must discharge via a tundish or finish a minimum of 20 mm above a draining board. The vent pipe material must be capable of conveying boiling water. The vent pipe must never be connected directly to a soil pipe.

1.4 Wherever possible the Supreme should be supplied directly from a rising main. If fed from a cold water feed cistern, the cistern must comply with the Water Regulations Guide (clause R27.2). It should be noted that water quality may be reduced when supplied from a cistern and additional forms of water pretreatment may be necessary.

1.5 In hard water areas, heated water will produce limescale which will be deposited within the heater. If this is not regularly removed it will impair the operation of the heater. Where rapid and excessive scale build up is likely to occur the use of a proprietary scale reducing device may be beneficial.

1.6 The installation must be carried out in accordance with the relevant requirements of:

- The appropriate Building Regulations either The Building Regulations, The Building Regulations (Scotland) or Building Regulations (Northern Ireland).
- The Water Fittings Regulations or Water Byelaws in Scotland.

1.7 The Supreme will adjust for ambient (room) temperatures of between 1°C and 40°C.

1.8 When not in use care must be taken to prevent it freezing; if thought to be frozen it must not be switched on. It must be left to thaw and must then be thorougly inspected to ensure it is totally thawed and undamaged.

1.9 The unit is not suitable for installation in an area where a water jet could be used.

2.0 INSTALLATION - MOUNTING

2.1 The Supreme must be vertically wall mounted using the bracket supplied. Special precautions may be required for the protection of children and/or infirm persons.

2.2 Figure.1 details the outside dimensions of the Supreme unit. A template is supplied to aid positioning the heater. It is recommended that the unit is positioned above a draining board. If this is not possible consideration should be given to any spillages that may occur under the heater. A drip tray is available as an accessory (Heatrae Sadia Code No. 95 970 123). The heater should be positioned at a height to suit the items being filled (flasks, pans, cups etc.). This is likely to position the base of the unit 250mm above the work surface.

2.3 Sufficient room should be left around the heater for access for maintenance and servicing. The top should not be covered as this will reduce the efficiency of the Supreme.

2.4 Ensure that the wall can support the full weight of the unit (see TECHNICAL SPECIFICATIONS) and that there are no hidden services (electricity, gas or water) below the surface of the wall.

2.5 Using the template mark the fixing positions and water and vent entry points. Drill and plug the fixing positions. Fix the mounting bracket to the wall using the two No.12 x 2” screws provided (**confirm suitability of all screws and plugs for use with the wall, if unsuitable due to wall type provide alternative fixings**).

2.6 If rear entry services are to be used the necessary holes for these should be prepared prior to hanging the unit onto its bracket.

2.7 Remove the front cover by: unscrewing the cover fixing screws bottom and top. Hang the Supreme onto the wall mounting bracket. Secure anchor point to the wall with the No.8 x 1” long screw (provided).

3.0 DIMENSIONS

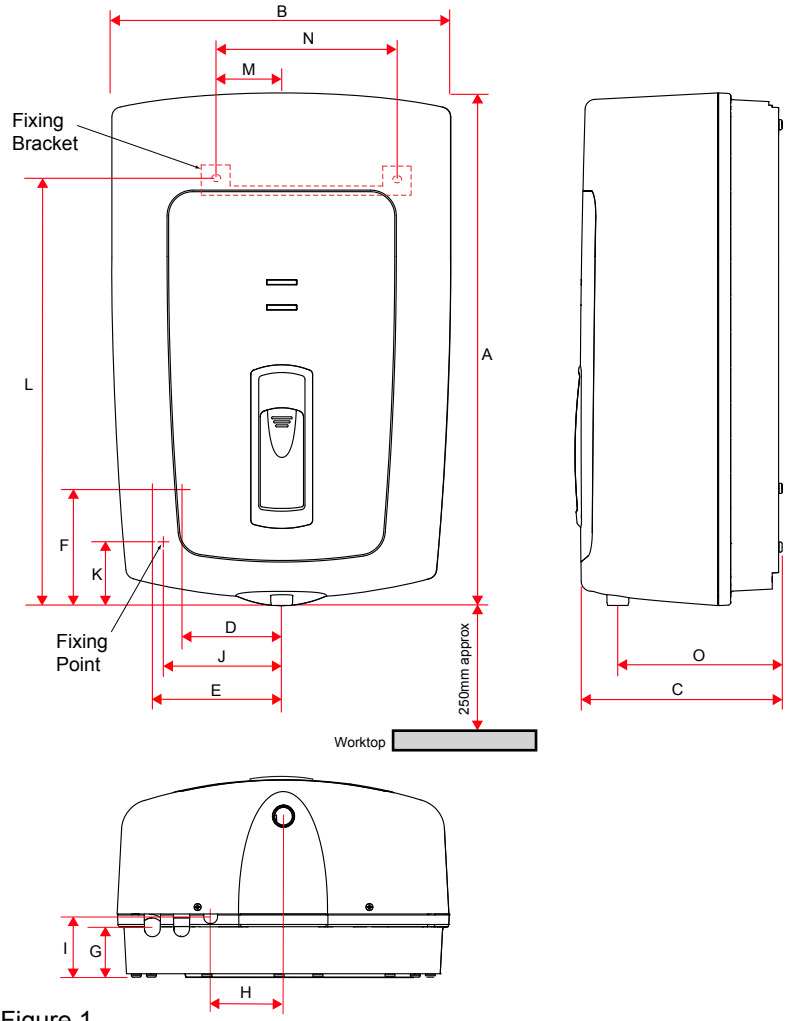

Figure 1

MODEL	DIMENSIONS (mm)							
	A	B	C	D	E	F	G	H
				INLET	VENT	INLET/ VENT	INLET/ VENT	CABLE ENTRY
150	445	290	190	85	115	101	49	46
165	510	335	200	103	133	101	49	69
180	510	335	262	103	133	101	49	69

	I	J	K	L	M	N	O
	CABLE ENTRY	FIXING POINT	FIXING POINT	BRACKET	BRACKET	BRACKET	OUTLET
150	59	96	50	342	52.5	169	152
165	61	117	71	405	84	217	163
180	61	117	71	405	84	217	225

4.0 INSTALLATION - WATER SUPPLY

4.1 Select appropriate push fit connector for chosen entry position:
Bottom entry water - 15mm x 15mm 90° elbow.
Rear entry water - 15mm x 15mm straight.
Note: stainless or chromed pipes DO NOT provide secure connections with push fit fittings (use copper pipe at joints).

4.2 Push the connector fully home (28mm engagement) onto the solenoid valve inlet spigot. To remove a push fit connector the collar (collet) should be pushed towards the body of the fitting whilst pulling the connector off the pipe.

4.3 If the inlet pipe run is horizontal and beneath the unit ensure it does not prevent access to the case screws.

4.4 Connect the inlet pipe to the push fit connector ensuring it is fully pushed home (28mm engagement). After connection DO NOT make soldered joints in the pipework close to the heater, as the heat may damage the connector or the water heater itself.

4.5 A WRAS listed isolating valve should be fitted to the cold supply to facilitate servicing the heater.

4.6 Push fit connectors are supplied to allow either bottom or rear entry of services (see figure 2). If a combination of entry points are required an additional connector will be required as follows:
Bottom inlet, rear vent 15mm x 15mm elbow
(Heatrae Sadia part no. 95 607 510)
Rear inlet, bottom vent 15mm x 15mm straight
(Heatrae Sadia part no. 95 607 509)

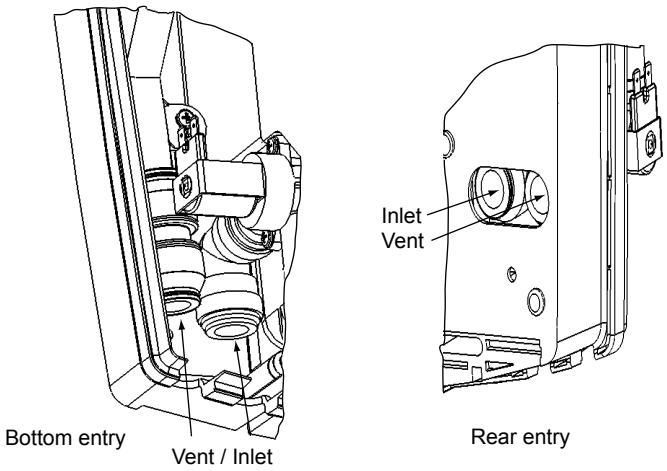

Figure 2

5.0 INSTALLATION - VENT PIPE

5.1 Select appropriate push fit connector for chosen entry position:

Bottom entry vent - 15mm x 15mm straight

Rear entry vent - 15mm x 15mm 90° elbow

5.2 Push the connector fully home (28mm engagement) onto the vent pipe connection.

5.3 Connect the vent pipe to the push fit connector ensuring it is pushed fully home (28mm engagement). Refer to the vent pipe requirements detailed in IMPORTANT INSTALLATION POINTS. If a bottom entry vent pipe is used the pipe must terminate below the unit, in a safe visible position. After connection DO NOT make soldered joints in the pipework close to the heater, as the heat may damage the connector or the water heater itself.

6.0 INSTALLATION - ELECTRICAL REQUIREMENTS

5.1 This appliance must be earthed.

5.2 The installation, supply cable and circuit protection must conform to the latest BS7671 'Requirements for electrical installations' (IEE Wiring Regulations).

5.3 The appliance must only be connected to a 230/240 V ac supply. A double pole isolating switch, with a contact separation of at least 3mm in both poles, must be incorporated in the electrical supply. The supply should be fused 13Amp.

5.4 If the Supreme is to be unused for significant periods of time running costs can be reduced by switching the unit off. It is recommended that this is done automatically by incorporating a suitable timeswitch in the supply to the unit. The use of a accessory No. 95 970 124 is recommended. The timeswitch can then be set to switch the unit on for a suitable period to allow it to heat up before it is next to be used. **NOTE**:**A timeswitch must be capable of switching 13 Amps resistive load.**

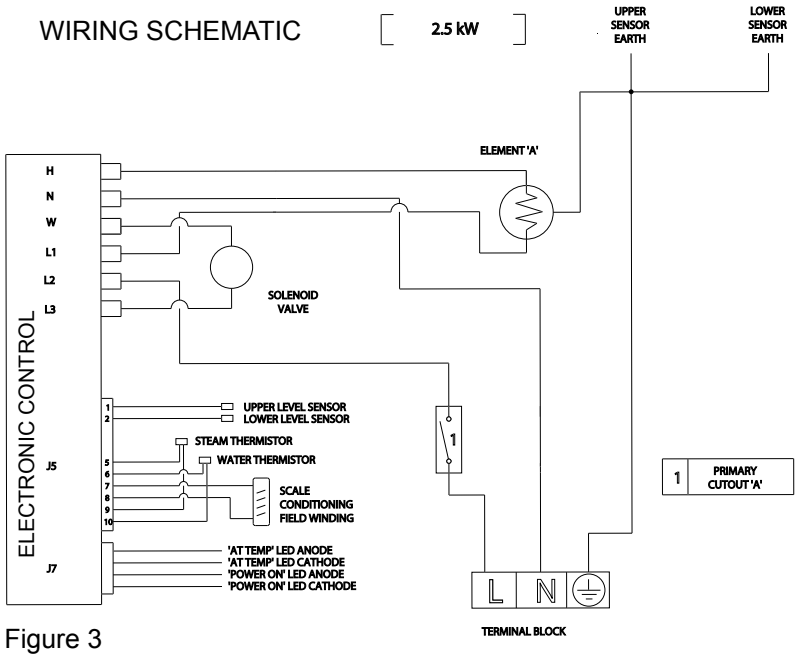

Figure 3

7.0 COMMISSIONING

7.1 The electronic control system of the Supreme has a self commissioning and calibration function. Once the heater is installed and all services have been connected the unit should require no further adjustment before use.

7.2 Check that all electrical, water and vent pipe connections have been made and are secure.

7.3 Replace the cover and secure with the fixing screws. Ensure the tank discharge tube is centrally located in the outlet spout. Turn on water and electrical supply.

7.4 The READY indicator will flash to indicate the unit is in its “self-commissioning” mode. The water in the unit will not be hot enough to use at this stage (DO NOT DRAW ANY WATER OFF WHILST COMMISIONING).

7.5 The READY indicator will continue to flash until the unit has reached boiling and has “self-calibrated”. At this point the READY indicator will remain illuminated. If for any reason the calibration procedure is interrupted it will restart after a short delay but may result in the calibrated temperature being too low. If this occurs switch the electrical supply OFF for several seconds and then switch ON. The calibration sequence will reset. Wait for the READY indicator to remain illuminated.

7.6 The unit is now ready to use, however, it is recommended that the first few fills be drawn off and discarded to ensure the freshness of the water.

7.7 The tap sealing washer pressure has been already set. If the tap drips after commissioning adjust the spring tension so that the handle is just loose.

a) Remove the tap bezel after removing the two screws securing it. **Note: to remove the bezel the handle will have to be operated. This will cause water to discharge from the outlet.**

b) Tighten the tap headwork nut (turn clockwise) until the handle is just loose. Replace bezel and securing screws. **Note: excessive adjustment will dismantle the tap, if heated this would result in the uncontrollable release of boiling water.**

7.8 Check for leaks.

8.0 MAINTENANCE

NOTE: Maintenance must be carried out by competent persons. Competent - i.e. trained, experienced, qualified.
Disconnect the electrical supply before removing the cover.
WARNING: electronics control by switching 'N' (neutral), in some instances neutral terminations will be at 230 volts with respect to earth.

Maintenance instructions are available from the Heatrae Sadia Service Department. Telephone 0844 871 1535, Fax 0844 871 1543.

8.1 The Supreme incorporates an electronic scale conditioning function which will reduce the rate of scale deposition in hard water areas. However, some deposits may still occur in the storage tank; these should be periodically removed.

8.2 The amount of usage of the unit will also determine the quality of scale build up. A regular inspection of the tank every 6 to 12 months will provide longer life of the product and optimum performance (removal of the steam plate assembly will give acess to the storage tank).

8.3 The front cover and spout will require a periodic wipe to clean any marks/splashes from use.

9.0 FAULT FINDING

YOUR HEATRAE SADIA SUPREME SHOULD GIVE TROUBLE FREE OPERATION. HOWEVER SHOULD A FAULT OCCUR THE TABLE BELOW SHOULD ALLOW MOST FAULTS TO BE IDENTIFIED. FAULT FINDING SHOULD ONLY BE CARRIED OUT BY A COMPETENT PERSON.

SYMPTOM	POSSIBLE CAUSE	ACTION
No indicator lights	1. If no water or heat – no power to unit	1. Check power supply is correctly connected and switched on and that primary cutout has not operated
	2. If hot water available – no power to indicator diodes	2. Check connections to indicators at 4 way plug
Unit does not fill on commissioning	1. If "ON" indicator not illuminated – no power to unit	1. Check power supply is correctly connected and switched on and that primary cutout has not operated
	2. If "READY" light flashing – water supply not turned on	2. Check water supply
	3. Solenoid fault	3. Check operation of solenoid valve, replace if necessary
	4. Low water pressure	4. Check supply
Unit does not heat on commissioning	1. If "ON" indicator not illuminated – no power to unit	1. Check power supply is correctly connected and switched on and that primary cutout has not operated
	2. If "READY" light flashing – water supply not turned on	2. Check water supply
	3. Solenoid fault	3. Check operation of solenoid valve, replace if necessary
	4. Low water pressure	4. Check supply
	5. Element fault	5. Check element continuity. If faulty replace
No indicator lights	1. If no water or heat – no power to unit	1. Check power supply is correctly connected and switched on and that primary cutout has not operated
	2. If hot water available – no power to indicator diodes	2. Check connections to indicators at 4 way plug
Unit does not fill on commissioning	1. If "ON" indicator not illuminated – no power to unit	1. Check power supply is correctly connected and switched on and that primary cutout has not operated
	2. If "READY" light flashing – water supply not turned on	2. Check water supply
	3. Solenoid fault	3. Check operation of solenoid valve, replace if necessary
	4. Low water pressure	4. Check supply
Water flows from vent and primary cutout activates	1. Solenoid valve fault	1. Check operation of solenoid valve. Replace if necessary
	2. Level sensor fault	2. Check level system earth connections
	3. Electronic control fault	3. Check connections to electronic control. Replace if necessary
	4. Low water pressure	4. Increase inlet pressure

SYMPTOM	POSSIBLE CAUSE	ACTION
Steam from vent pipe and primary cutout operates	1. Control thermistor fault - open circuit 2. Electronic control fault 3. Scale build up	1. Check continuity (5Kohms at 100°C, 100Kohms at 25°C) 2. Check connections to electronic control. Replace if necessary 3. Descale unit
Drips from outlet	1. Incorrect spring tension 2. Scale : debris under tap seal 3. Damaged tap seal 4. Scale on tap outlet spout	1. Ensure tap headwork nut correctly adjusted 2. Remove and clean as necessary 3. Replace tap seal 4. Clean tap outlet
Water "runs on" when tap released	1. Scale on tap outlet spout 2. Scale : debris under tap seal 3. Damaged tap seal	1. Clean tap outlet 2. Remove and clean as necessary 3. Replace tap seal
Stale taste to water	Unit left unused for several days	Empty and allow to refill before use
Tap sticks open	Dirt around handle pivot	Clean with a stiff paint brush
Water consistently cooler than when new	1. Control thermistor pocket has a covering of scale 2. Control thermistor out of calibration 3. Steam thermistor out of calibration	1. Descale the pocket surface & unit 2. Check values (5Kohms at 100°C, 100Kohms at 25°C) 3. Check values (5Kohms at 100°C, 100Kohms at 25°C)

For any faults that cannot be identified using the Fault Finding chart please contact the Heatrae Sadia Service Department, telephone 0844 871 1535, fax 0844 871 1543.

10.0 SPARE PARTS

The following comprehensive list of spare parts is available for your Supreme water heater. Please refer to the rating label on the right hand side of your heater before ordering to ensure the correct spare parts are obtained.

DO NOT REPLACE WITH PARTS NOT RECOMMENDED BY HEATRAE SADIA - THIS WILL INVALIDATE YOUR GUARANTEE AND MAY RENDER THE INSTALLATION DANGEROUS.

1. Element assembly 2.5kW (incorporating start dry cutout)..... 95 606 952
2. Element assembly sealing gasket.....95 611 816
3. Primary cutout (vent pipe).....95 612 001
4. Solenoid valve assembly.....95 605 877
5. Level sensor assembly (2.5ltr Model).....95 606 971
   Level sensor assembly (5.0/7.5ltr Model).....95 606 972
6. Circuit board (All Models).....95 615 007
7. Outlet tap headwork (inc. handle).....95 605 019
8. Outlet tap stem.....95 605 832
9. Outlet tap cup seal.....95 611 731
10. Bezel for tap & cover.....95 605 020
11. Cover assy & screws (2.5ltr Model).....95 607 197
    Cover assy & screws (5.0ltr Model).....95 607 198
    Cover assy & screws (7.5ltr Model).....95 607 199
12. Steam condenser assy (2.5ltr Model).....95 607 015
    Steam condenser assy (5.0ltr Model).....95 607 016
    Steam condenser assy (7.5ltr Model).....95 607 018
13. Condenser sealing gasket (2.5ltr Model).....95 611 817
    Condenser sealing gasket (5.0ltr Model).....95 611 819
    Condenser sealing gasket (7.5ltr Model).....95 611 820
14. 'O' ring kit.....95 611 002
15. Manifold assy 2.5ltr.....95 607 206
    Manifold assy 5.0ltr.....95 607 207
    Manifold assy 7.5ltr.....95 607 208
16. Outlet spout plastic - tank.....95 604 668
17. Outlet spout - cover.....95 604 001
18. Push fit connector 15x15 straight.....95 607 509
19. Push fit connector 15x15 elbow.....95 607 510
20. Tank (2.5ltr Model).....95 608 926
    Tank (5.0ltr Model).....95 608 927
    Tank (7.5ltr Model).....95 608 928
21. Tank drain & seal.....95 608 929
22. Start dry cutout (element).....95 612 691
23. Solenoid valve coil.....95 605 839
24. Fitting kit (2.5ltr Model).....95 607 024
25. Fitting kit (50./7.5ltr Model).....95 607 025
26. Wiring harness 4-way.....95 612 006
27. Wiring harness complete (2.5ltr Model).....95 612 042
    Wiring harness complete (5.0/7.5ltr Model).....95 612 043

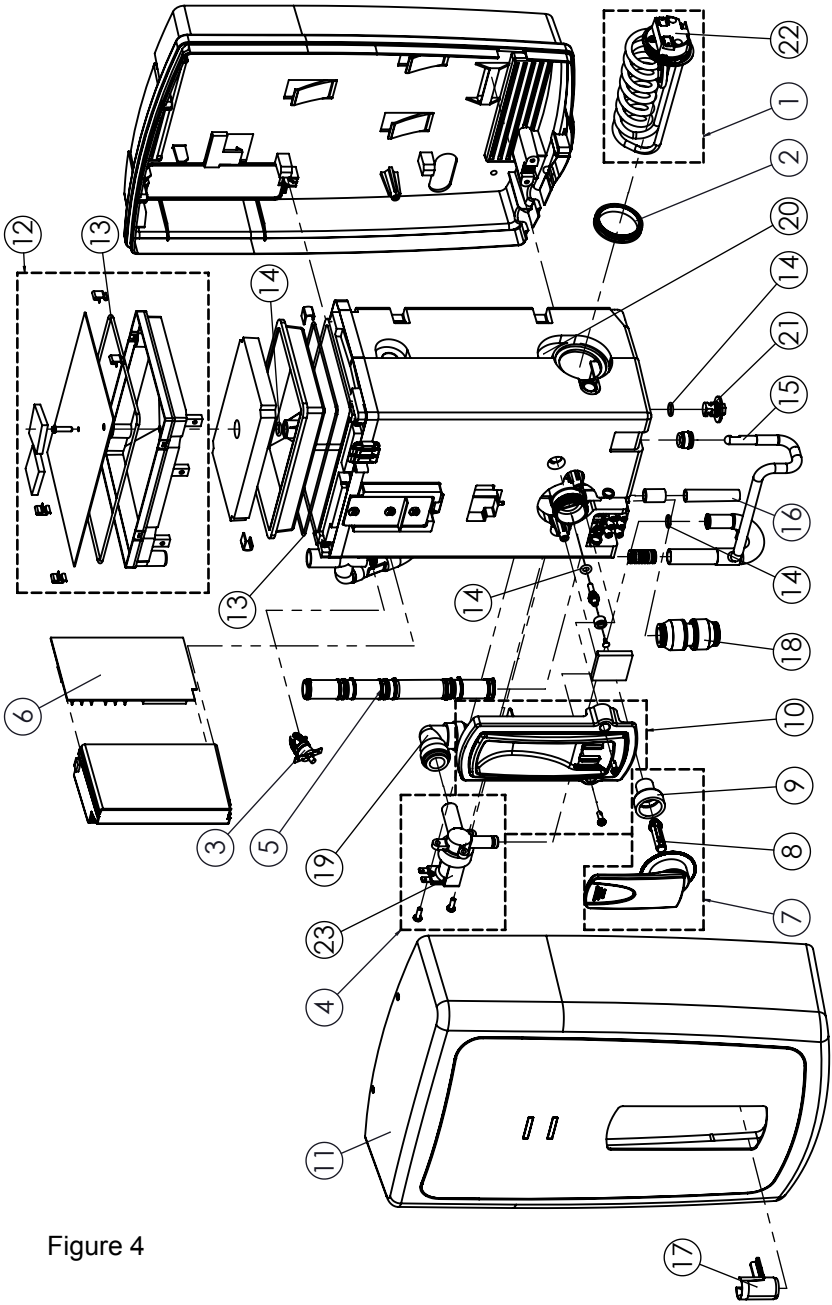

Figure 4

11.0 USER INSTRUCTIONS

11.1 Once installed the filling and heating cycles of the Supreme are completely automatic.

11.2 To dispense water, a suitable container having been placed under the outlet spout, the tap handle should be pulled down and towards (or pushed away from) the user. The water dispensed will at all times be boiling or close to boiling point so due caution must be taken when using the product, especially if it is likely to be used by children, aged or infirm persons.

11.3 The tap handle is spring loaded so that when released it will spring back to the “off” position (no flow).

11.4 The Supreme is fitted with two indicators to give a visual indication of the unit’s status.

ON Will be illuminated as long as the electrical supply to the Supreme is switched on.
READY When fully illuminated indicates that the stored water is hot enough to use.

11.5 If the store of hot water is completely withdrawn, the flowrate from the outlet tap will reduce to the filling rate of the heater. This slow flowrate allows the incoming water to be instantly reheated, it does not indicate a fault with the water heater.

11.6 If the Supreme is not used for a few days the water may become “stale”. In these instances it is advisable to draw off the contents and discard the water at least twice to remove the “stale” water. This will ensure that “freshly” boiled water is used to make your drinks etc.

11.7 Similarly, if left unused it is possible that some scale residue will collect in the outlet tap. This will cause the outlet water to appear “milky” for a short while. If this condition occurs it is recommended that the first few cups are drawn off and discarded.

GUARANTEE

This Supreme water heater is guaranteed for a period of two years from the date of purchase provided:

1. The unit has been installed in accordance with these instructions and all necessary inlet, vent and electrical connections have been fitted correctly.
2. Any valves or controls are of Heatrae Sadia recommended type.
3. The unit has not been tampered with and has been regularly maintained as detailed in the maintenance instructions.
4. The unit has been used only for heating potable water.
5. It has been installed in the UK.

The unit is not guaranteed against damage by frost or due to the build up of scale. Please note that if Heatrae Sadia personnel or agents are requested to descale a unit, this work will be chargeable.
This guarantee does not affect the statutory rights of the consumer.

The policy of Heatrae is one of continuous product development and, as such, we reserve the right to change specifications without notice.

ENVIRONMENTAL INFORMATION

This product is manufactured from many recyclable materials. At the end of its useful life it should be disposed of at a Local Authority Recycling Centre.

Notes:

Notes:

Spares Stockists

For the fast and efficient supply of spares please contact the stockists listed below.

Electric Water Heating Co.
2 Horsecroft Place, Pinnacles
Harlow, Essex, CM19 5BT
Tel: 0845 0553811
E-Mail: sales@ewh.co.uk

SPD
Units 9 & 10 Hexagon Business Centre
Springfield Road, Hayes
Middlesex, UB40 0TY
Tel: 020 8606 3567

Parts Center
Tel: 0845 270 9800
www.partscenter.co.uk

Newey & Eyre
Specialist Products Division
Please contact your local branch

UK Spares Ltd.
Tower Lane, Warmley
Bristol, BS30 8XT
Tel: 0117 961 6670

William Wilson Ltd.
Unit 3A, 780 South Street
Whiteinch, Glasgow, G14 OSY
Tel: 0141 434 1530

Advanced Water Company Ltd
Unit DS Enterprise Way
Vale Park, Evesham
Worcs, WR11 1GS
Tel: 01386 760066

HEATRAE SADIA
The quality name in water heating

Service: 0844 871 1535
Service Fax: 0844 871 1543
Service Email: heatraesadiaservice@heateam.co.uk

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